



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Spectra Energy Transmission, LLC

Certificate of Analysis Number:

09081445

<u>Report To:</u> Spectra Energy Transmission, LLC Joe Bauer 5400 Westheimer Court Houston TX 77056- ph: (713) 627-5400 fax:	<u>Project Name:</u> Spectra Energy <u>Site:</u> Steckman Ridge <u>Site Address:</u> <u>PO Number:</u> Agreement No. ENV-0506 <u>State:</u> Pennsylvania <u>State Cert. No.:</u> 68-03598 <u>Date Reported:</u> 8/31/2009
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This Report Contains A Total Of 9 Pages

Excluding This Page, Chain Of Custody

And

Any Attachments

8/31/2009

Date



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8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
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Case Narrative for:
Spectra Energy Transmission, LLC

Certificate of Analysis Number:

09081445

Report To: Spectra Energy Transmission, LLC Joe Bauer 5400 Westheimer Court Houston TX 77056- ph: (713) 627-5400 fax:	Project Name: Spectra Energy Site: Steckman Ridge Site Address: PO Number: Agreement No. ENV-0506 State: Pennsylvania State Cert. No.: 68-03598 Date Reported: 8/31/2009
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I. SAMPLE RECEIPT:

All samples were received intact. The internal ice chest temperatures were measured on receipt and are recorded on the attached Sample Receipt Checklist.

Samples for COC ARF 9835 were received at a temperature of 15.2 and 15.9 degrees Celsius.

Please note, a Chain of Custody was not received for sample ID "MISC Grass" and was sent via e-mail by client on August 31, 2009. Collection date and times were noted on sample containers.

Original Chain of Custody requested piano analyses by Method GPA2186; however, due to sample matrix (grass) a piano analyses was not possible. Sample was logged in as per revised Chain of Custody sent by client via e-mail on August 31, 2009..

Due to sample matrix (grass) insufficient sample was available for a percent moisture analyses. Please note, results for the PCB analyses by Method SW8082 will be reported on a wet-weight basis.

Client was notified of the nonconformances mentioned above via Sample Receipt Confirmation e-mail on August 31, 2009 and per client request via e-mail on August 31, 2009, SPL continued with the analyses requested.

Please see attached sample receipt checklist for any further nonconformance issues.

II: ANALYSES AND EXCEPTIONS:

PCB (SW8082):

Client sample ID "MISC Grass" (SPL ID: 09081445-01) was reported with all PCB aroclors as nondetect with elevated sample quantitation limits due to sample matrix and initial sample used for sample extraction. Please refer to the analytical report for the prep factor that was applied to the data.

III. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report (" mg/kg-dry " or " ug/kg-dry ").

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Some of the percent recoveries and RPD's on the QC report for the MS/MSD may be different than the calculated recoveries and RPD's using the sample result and the MS/MSD results that appear on the report because, the actual raw result is used to perform the calculations for percent

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8/31/2009

Sylvia Grice

Senior Project Manager

Test results meet all requirements of NELAC, unless specified in the narrative.

Date



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recovery and RPD.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or by his designee, as verified by the following signature.

A handwritten signature in cursive script, reading "Sylvia Grice", is located in the bottom left area of the page.

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8/31/2009

Sylvia Grice

Senior Project Manager

Date

Test results meet all requirements of NELAC, unless specified in the narrative.



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Spectra Energy Transmission, LLC

Certificate of Analysis Number:

09081445

Report To: Spectra Energy Transmission, LLC

Joe Bauer

5400 Westheimer Court

Houston

TX

77056-

ph: (713) 627-5400

fax: (713) 989-8347

Fax To:

Project Name: Spectra Energy

Site: Steckman Ridge

Site Address:

PO Number: Agreement No. ENV-0506

State: Pennsylvania

State Cert. No.: 68-03598

Date Reported: 8/31/2009

Field Sampler: Mary Velasquez

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
MISC Grass	09081445-01	Solid	8/28/2009 12:55:00 PM	8/31/2009 9:00:00 AM	9835	☐

Sylvia Grice
Senior Project Manager

8/31/2009

Date

Kesavalu M. Bagawandoss Ph.D., J.D.
Laboratory Director

Ted Yen
Quality Assurance Officer



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
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Client Sample ID: MISC Grass

Collected: 08/28/2009 12:55

SPL Sample ID: 09081445-01

Site: Steckman Ridge

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
POLYCHLORINATED BIPHENYLS BY METHOD 8082				MCL	SW8082	Units: ug/kg	
Aroclor 1016	ND		200	1	08/31/09 16:58	RLR	5185262
Aroclor 1221	ND		200	1	08/31/09 16:58	RLR	5185262
Aroclor 1232	ND		200	1	08/31/09 16:58	RLR	5185262
Aroclor 1242	ND		200	1	08/31/09 16:58	RLR	5185262
Aroclor 1248	ND		200	1	08/31/09 16:58	RLR	5185262
Aroclor 1254	ND		200	1	08/31/09 16:58	RLR	5185262
Aroclor 1260	ND		200	1	08/31/09 16:58	RLR	5185262
PCBs (total)	ND		200	1	08/31/09 16:58	RLR	5185262
Surr: Decachlorobiphenyl	104		% 34-175	1	08/31/09 16:58	RLR	5185262
Surr: Tetrachloro-m-xylene	75.0		% 30-141	1	08/31/09 16:58	RLR	5185262

<u>Prep Method</u>	<u>Prep Date</u>	<u>Prep Initials</u>	<u>Prep Factor</u>
SW3550C	08/31/2009 13:44	QMT	6.00

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

Quality Control Documentation



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Spectra Energy Transmission, LLC

Spectra Energy

Analysis: Polychlorinated Biphenyls by Method 8082
Method: SW8082

WorkOrder: 09081445
Lab Batch ID: 93408

Method Blank

RunID: HP_W_090831A-5185261 Units: ug/kg
Analysis Date: 08/31/2009 16:41 Analyst: RLR
Preparation Date: 08/31/2009 13:44 Prep By: QMT Method: SW3550C

Samples in Analytical Batch:

Lab Sample ID Client Sample ID
09081445-01B MISC Grass

Analyte	Result	Rep Limit
Aroclor 1016	ND	33
Aroclor 1221	ND	33
Aroclor 1232	ND	33
Aroclor 1242	ND	33
Aroclor 1248	ND	33
Aroclor 1254	ND	33
Aroclor 1260	ND	33
PCBs (total)	ND	33
Surr: Decachlorobiphenyl	116.0	34-175
Surr: Tetrachloro-m-xylene	91.5	30-141

Laboratory Control Sample (LCS)

RunID: HP_W_090831A-5185260 Units: ug/kg
Analysis Date: 08/31/2009 16:23 Analyst: RLR
Preparation Date: 08/31/2009 13:44 Prep By: QMT Method: SW3550C

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Aroclor 1016	333	311	93.5	51	144
Aroclor 1260	333	299	89.9	33	164
Surr: Decachlorobiphenyl	33.3	38.3	115	34	175
Surr: Tetrachloro-m-xylene	33.3	30.9	92.8	34	141

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 09081500-01
RunID: HP_W_090831A-5185264 Units: mg/Kg
Analysis Date: 08/31/2009 17:32 Analyst: RLR
Preparation Date: 08/31/2009 13:44 Prep By: QMT Method: SW3550C

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Aroclor 1016	ND	0.333	0.358	108	0.333	0.347	104	3.15	30	28	143

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Spectra Energy Transmission, LLC

Spectra Energy

Analysis: Polychlorinated Biphenyls by Method 8082
Method: SW8082

WorkOrder: 09081445
Lab Batch ID: 93408

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 09081500-01
RunID: HP_W_090831A-5185264 Units: mg/Kg
Analysis Date: 08/31/2009 17:32 Analyst: RLR
Preparation Date: 08/31/2009 13:44 Prep By: QMT Method: SW3550C

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Aroclor 1260	ND	0.333	0.341	102	0.333	0.323	97.1	5.30	24	15	166
Surr: Decachlorobiphenyl	ND	33.3	29.6	88.8	33.3	30.3	90.9	2.33	30	34	175
Surr: Tetrachloro-m-xylene	ND	33.3	22.7	68.2	33.3	22.0	66.1	3.08	30	30	141

Qualifiers: ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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*Sample Receipt Checklist
And
Chain of Custody*



HOUSTON LABORATORY
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HOUSTON, TX 77054
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Sample Receipt Checklist

Workorder:	09081445	Received By:	T_B
Date and Time Received:	8/31/2009 9:00:00 AM	Carrier name:	Fedex-Priority
Temperature:	15.2, 15.9°C	Chilled by:	Water Ice

- | | | | |
|---|---|--|---|
| 1. Shipping container/cooler in good condition? | Yes ☒ | No ☐ | Not Present ☐ |
| 2. Custody seals intact on shipping container/cooler? | Yes ☐ | No ☐ | Not Present ☒ |
| 3. Custody seals intact on sample bottles? | Yes ☐ | No ☐ | Not Present ☒ |
| 4. Chain of custody present?
1) Chain of custody not submitted for COC ARF 9835. | Yes ☐ | No ☒ | |
| 5. Chain of custody signed when relinquished and received?
1) Chain of custody not submitted for COC ARF 9835. | Yes ☐ | No ☒ | |
| 6. Chain of custody agrees with sample labels?
1) Chain of custody not submitted for COC ARF 9835. | Yes ☐ | No ☒ | |
| 7. Samples in proper container/bottle? | Yes ☒ | No ☐ | |
| 8. Sample containers intact? | Yes ☒ | No ☐ | |
| 9. Sufficient sample volume for indicated test? | Yes ☒ | No ☐ | |
| 10. All samples received within holding time? | Yes ☒ | No ☐ | |
| 11. Container/Temp Blank temperature in compliance?
795503878505-15.9C, 870101736740- 15.2C | Yes ☐ | No ☒ | |
| 12. Water - VOA vials have zero headspace? | Yes ☐ | No ☐ | VOA Vials Not Present ☒ |
| 13. Water - Preservation checked upon receipt (except VOA*)? | Yes ☐ | No ☐ | Not Applicable ☒ |

*VOA Preservation Checked After Sample Analysis

SPL Representative:

Contact Date & Time:

Client Name Contacted:

Non Conformance Issues:

Client Instructions:



chain of custody and sample log

contact name:

contact no:

SPL Houston
8880 Interchange Drive

Houston, TX
77054

09081445

REVISED
8-31-09

LABORATORY USE ONLY

coc/arf no.: 9835

Page 1 of 1

distribution

Original to LABORATORY

Copy to Spectra Lab Services

fax: (713) 386-4733

Comp. Station or

Upstream Station:

shipping address:

Steckman Ridge
ATTN: Sean Cramer
1809 Rock Hill Church RD
Clearville, PA 15535

717-540-8303

program code:

work order:

turnaround:

region:

routing code:

accounting code:

MISC

24 Hours

Northeast

GTA/GTE/AST

10076 0401101 63016 A439

method of shipment (to field):

method of shipment (from field):

freight bill#:

cooler temp - (c):

condition of contents:

sampler print:

sampler signature:

Lab Acceptance Signature:

FEDEX (Next day)

date/time:

relinquished, by:

date/time:

recd. by:

date/time:

relinquished, by:

date/time:

recd. by:

date/time:

comments or lab remarks:

environmental & corrosion analysis:

date bottles were required: 8/29/2009 12:00:00AM

expected sample date: 8/29/2009 12:00:00AM

prelim data:

False

Type II Std.

type of data package:

e-mail: JJBauer@spectraenergy.com

Sys_sample_code	Sample Point	Sample Comment	Collection Date	Collection Time	Matrix	COMP/ GRAB	MAG	Bottle Preservative	ICE	Use Accepted	QC Required
9835-01	MISC	Grass			S	G	MAG - 8082_PCH_S_1	None	no	False	False

* Each sample on the chain of custody should have a unique sample date and time.

* Sampler please fill in all shaded areas.



chain of custody and sample log

contact name:

contact no:

SPL Houston
8880 Interchange Drive

Houston, TX
77054

cod/art no.: 9835

Page 1 of 1

distribution

Original to LABORATORY

Copy to Spectra Lab Services

fax: (713) 386-4733

09081445

LABORATORY USE ONLY

Comp. Station or

Upstream Station:

ATTN: Sean Cramer

1809 Rock Hill Church RD

Clearville, PA 15535

Steckman Ridge

method of shipment (to field):

method of shipment (from field):

freight bill#:

cooler temp - (c):

condition of contents:

sampler print:

sampler signature:

Lab Acceptance Signature:

717-540-8303

MISC

24 Hours

Northeast

GTAGTEAST

10076 0401101 63016 A439

15.2°C, 15.9°C

date/time: 8/31/09 900

relinquished. by:

date/time:

recd. by:

date/time:

8/31/09 900

relinquished. by:

date/time:

recd. by:

date/time:

Cawwite

comments or lab remarks:

environmental & corrosion analysis:

date bottleware required: 8/29/2009 12:00:00AM

expected sample date: 8/29/2009 12:00:00AM

prelim data: False

Type II Std.

type of data package:

e-mail:

JJBauer@spectraenergy.com

Sys_sample_code	Sample Point	Sample Comment	Collection Date	Collection Time	Matrix	COMP/ GRAB	MAG	Bottle Preservative	ICE	Use Accepted Pkg.	QC Required
9835-01	MISC	Grass			S	G	MAG - GPA2186_C25_HL	none	no	False	
9835-01	MISC	Grass			S	G	MAG - 8082_PCB_S_1	None	no	False	

* Each sample on the chain of custody should have a unique sample date and time.

* Sampler please fill in all shaded areas.